tests conducted, or submit evidence that such tests have been conducted, by the Underwriters' Laboratories, the Factory Mutual Laboratories, or by a properly supervised and inspected test laboratory acceptable to the Commandant (G-MSE), relative to determining the lift, relieving pressure and vacuum, and flow capacity of a representative sample of the pressure-vacuum relief valve in each size for which approval is desired. Test reports including flow capacity curves must be submitted to the Commandant (G-MSE).

[56 FR 35827, July 29, 1991, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996]

Subpart 162.018—Safety Relief Valves, Liquefied Compressed Gas

§ 162.018-1 Applicable specifications, and referenced material.

- (a) There are no other specifications applicable to this subpart except as noted in this subpart.
- (b) The following referenced material from industry standards of the issue in effect on the date safety relief valves are manufactured shall form a part of the regulations of this subpart (see §§ 2.-75-17 through 2.75-19 of Subchapter A (Procedures Applicable to the Public) and Subpart 50.15 of Subchapter F (Marine Engineering) of this chapter):
- (1) ASME (American Society of Mechanical Engineers) Code (see §50.-15-5 of subchapter F (Marine Engineering) of this chapter): The following paragraph from section VIII of the ASME Code:
- (i) UG-131, flow rating of valves, see $\S 162.018-7(a)$.
- (2) CGA (Compressed Gas Association) standard: The following standard of the Compressed Gas Association (see §50.15–20(a) of Subchapter F (Marine Engineering) of this chapter):
- (i) S-1.2.5.2, Flow test data for safety and relief valves for use on pressure vessels, see \$162.018-7(a).
- (c) A copy of this specification and the referenced material listed in this section, if used, shall be kept on file by the manufacturer, together with the approved plans, specifications, and cer-

tificate of approval. It is the manufacturer's responsibility to have the latest issue, including addenda and changes, of the referenced material on hand when manufacturing equipment under this subpart.

- (1) The ASME Code may be obtained from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, N.Y. 10017.
- (2) The CGA standard may be obtained from the Compressed Gas Association, 500 Fifth Avenue, New York, N.Y. 10036.

[CGFR 68-82, 33 FR 18908, Dec. 18, 1968]

§162.018-2 Scope.

(a) This specification covers requirements for the design, construction and testing of safety relief valves intended for use on unfired pressure vessels containing liquefied compressed gases installed on merchant vessels subject to inspection by the Coast Guard.

(b) [Reserved]

[CGFR 52-43, 17 FR 9540, Oct. 18, 1952]

§162.018-3 Materials.

- (a) The materials used in the manufacture of safety relief valves shall conform to the applicable requirements of subchapter F (Marine Engineering) of this chapter, except as otherwise specified in this subpart, and shall be resistant to the corrosive or other action of the liquefied compressed gas in the liquid or gas phase.
- (b) All pressure containing external parts of valves must be constructed of materials melting above 1700 °F. for liquefied flammable gas service. Consideration of lower melting materials for internal pressure-containing parts will be given if their use provides significant improvement to the general operation of the valve. Flange gaskets shall be metal or spiral wound asbestos
- (c) Nonferrous materials shall not be used in the construction of valves for anhydrous ammonia or other service where susceptible to attack by the lading.
- (d) The seats and disks shall be of suitable corrosion resistant material. Seats and disks of cast iron or malleable iron shall not be used. Springs